

EN995141V

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#2

Applicants:	Bernd K. Appelt et al.	: Art Unit:
Serial No.:	To Be Assigned	: Examiner:
Filed:	Herewith	:
For:	PRINTED CIRCUIT BOARDS FOR	:
	ELECTRONIC DEVICE PACKAGES	:
	HAVING GLASS FREE NON-	:
	CONDUCTIVE LAYERS AND	:
	METHOD FOR FORMING SAME	:



INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

S I R :

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO 1449 (R&P) submitted herewith.

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

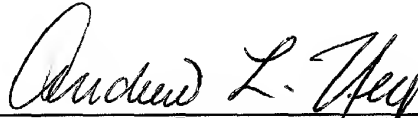
In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

Under 37 C.F.R. § 1.98(d), copies of the patents and publications listed on the enclosed PTO Form 1449 are not required to be provided, because they were cited by or submitted to the Patent and

Trademark Office in prior application Serial No. 08/699,902, filed August 20, 1996, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

This Information Disclosure Statement is being filed together with the application. Therefore, no fee or certification is required. 37 C.F.R. § 1.97(b).

Respectfully submitted,



Kevin R. Casey, Reg. No. 32,117
Andrew L. Ney, Reg. No. 20,300
Attorneys for Applicants

Enclosure: PTO Form 1449

Dated: June 29, 1999

Suite 301

One Westlakes, Berwyn

P.O. Box 980

Valley Forge, PA 19482-0980

(610) 407-0700

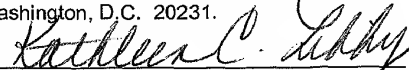
The Assistant Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. 09-0457 (IBM Corporation) of any fees associated with this communication.

EXPRESS MAIL

Mailing Label Number: EL445735586US

Date of Deposit: June 29, 1999

I hereby certify that this paper and fee is being deposited, under 37 C.F.R. § 110 and with sufficient postage, using the "Express Mail Post Office to Addressee" service of the United States Postal Service on the date indicated above and that the deposit is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.



Kathleen C. Libby

FORM PTO-1449

Sheet 1 of 1

FORM PTO-1449 (Rev. 2-32)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. EN995141V	SERIAL NO To Be Assigned
Information Disclosure Statement by Applicant (Use several sheets if necessary)		APPLICANT Bernd K. Appelt et al.	
		FILING DATE Herewith	GROUP

U.S. PATENT DOCUMENTS

Exmr Initial	Document Number	Date	Name	Class	Sub Class	Filing Date
	4,925,525	05/15/90	Oku et al.			
	4,980,217	12/25/90	Grundfest et al.			
	5,004,639	04/02/91	Desai			
	5,050,038	09/17/91	Malaurie et al.			
	5,114,518	05/19/92	Hoffarth et al.			
	5,252,195	10/12/93	Kobayashi et al.			
	5,277,787	01/11/94	Otani et al.			
	5,288,542	02/22/94	Cibulsky et al.			
	5,418,689	05/23/95	Alpaugh et al.			
	5,468,999	11/21/95	Lin et al.			
	5,521,332	05/28/96	Shikata et al.			
	5,500,555	03/19/96	Ley			
	5,625,225	12/22/93	Huang et al.			
	5,485,038	01/16/96	Licari et al.			
	5,598,031	06/23/93	Groover et al.			
	3,777,220	12/04/73	Tatusko et al.			
	4,404,059	09/13/83	Livshits et al.			
	4,769,270	09/06/88	Nagamatsu et al.			
	5,590,030	01/10/90	Kametani et al.			
	4,191,800	03/04/80	Holtzman			

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

1)	"Chapter 12: Printed Circuit Board Packaging," <i>Microelectronics Packaging Handbook</i> , Tummala, Rao R., et al., Editors, and Klopfenstein, Alan G., Managing Editor, Van Nostrand Reinhold (New York) 1989, pp. 863-921.
2)	"Electrochemical Migration in Multichip Modules," Rudra, B., et al., <i>Circuit World</i> , Vol. 22, No. 1, 1995, pp. 67-70.
3)	"Microstructure of Conductive Anodic Filaments Formed during Accelerated Testing of Printed Wiring Boards," Ready, W. J., et al., <i>Circuit World</i> , Vol. 21, No. 4, 1995, pp. 5-9

Examiner	Date Considered
----------	-----------------

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.